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MARCH  
1955

# Foreign Agriculture



JAPANESE CHILDREN EATING  
WHEAT ROLLS (SEE PAGE 43)



# Foreign Agriculture

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## FRONT COVER

### School Lunch in Japan

At a school in Tokyo, children are fed a large wheat roll, a bowl of milk, and a hot dish five times a week. Owing in large part to the school lunch program, which reaches about one-fourth of the school children in Japan, popularity of wheat has risen in the national diet and consumption of it has increased; see story beginning on page 43. (Photo courtesy of Richard K. Baum.)

## BACK COVER

### United States Exports Of Breeding Cattle

For the last half-dozen years our exports of breeding cattle to Latin American countries have been

steadily climbing, giving evidence of the increased interest in those countries in improving livestock herds.

## NEWS NOTE

### U. S. Farm Exports Up 10 Percent

United States sales of farm products abroad increased from July 1954 to January 1955 to be 10 percent higher than they were in the corresponding period in 1953-54. Total for the 6 months is estimated at \$1.8 billion.

An important circumstance underlying this increase in our agricultural exports is the greater prosperity that many other countries are now enjoying. Another is the poor crops in Europe last year, which have made it necessary for many European countries to buy more agricultural products abroad.

United States farm exports totaled \$329 million in November 1954, greatest monthly total since March 1952 and 17 percent higher than in November 1953. Largest increases were in cotton, cottonseed oil, soybeans, lard, oranges, barley, potatoes, and dry edible peas and beans. Declines took place in milk, beef, corn, and rice.

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## FOREIGN AGRICULTURE

ALICE FRAY NELSON, EDITOR

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An Indian boy lifts a chappati from the charcoal stove on which he cooked it and displays it to a customer at his roadside stand. The chappati, made from coarsely ground wheat mixed with salt and water, is a common wheat food in both India and Pakistan.

# Asia—Expanding Market For Wheat Foods

By RICHARD K. BAUM

Southern Asia and the island nations that lie close to the continent's shores have been, in the past 10 years, an expanding market for wheat foods. In most of these years, Asia has been short of its traditional staple food, rice, the price of which has been well above that of wheat—sometimes twice as high. World War II and the strife that has since persisted in many rice-growing countries of Asia brought on the shortages.

Last summer saw rice supplies up somewhat and the price decline. But wheat had been widely introduced among Asians and had made a firm place for itself in many areas. Imports of wheat and wheat flour by Asian countries had increased from a prewar average of less than 54 million bushels to a high of nearly 290 million bushels in the marketing season of 1951-52. This high demand

seems to be continuing, and wheat has a good chance of keeping much of its gain.

Wheat consumption might increase even more if growers, millers, and exporters in the principal wheat exporting countries joined with their governments to promote increased use of wheat foods as a supplement to rice in Asia.

In such an endeavor, government cooperation is needed because of certain obstacles that cannot readily be overcome by private trading practices.

The "trade missions" sent to various parts of the world last spring by the United States Department of Agriculture cited two of the most serious obstacles to the expansion of trade: The shortage of foreign currencies within certain countries and the

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Mr. Baum is Executive Secretary, Oregon Wheat Growers League.

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national trade regulations that tend to restrict imports below actual demand. To some degree, these restrictions have affected all the world's major wheat exporters.

To ease such trade barriers the United States Congress, in the closing days of the 1954 session, passed the Agricultural Trade Development and Assistance Act, known as Public Law 480. New avenues were thereby opened for reaching formerly unobtainable markets.

This law permits importing nations to purchase United States surplus commodities with local currencies under certain conditions. One provision promises to benefit all of the world's wheat exporters; it provides funds for promoting wheat products in the importing countries and so will increase total use of wheat and wheat products.

It was the provision for such promotional projects that took a joint industry-government team to the Far East late last fall—a team composed of Eral O. Pollock of the Foreign Agricultural Service, Gordon P. Boals of the Millers' National Federation, and me. Our job was to explore possibilities for promoting wheat foods in each of the major wheat and wheat flour importing countries there.

We went first to Japan, one of the three countries we visited that import wheat; the other five import flour.

Japan is an island nation about one and a half times the size of the State of Oregon with a population of 89 million people, which is increasing at the rate of about 1.2 million a year. The terrain and soil of the country are such that only 16 percent of the land is farmed. Though it is farmed



Four trained nutritionists employed by Japan's Ministry of Health and Welfare stand in the kitchen of their well-equipped demonstration car, with which they hope to reach 20,000 housewives a year.

intensively, production falls short of demand by about 20 percent, and Japan will need to import about 4 million metric tons of food grains each year for many years to come. Imports of wheat, which range from 60 million bushels to 80 million bushels a year (1.6 million to 2.2 million metric tons), are controlled by the government, which decides what type will be purchased and from what country.

Japan, like most Asiatic countries, has a serious dollar shortage. During the conflict in Korea, the Japanese Government built up reserves of over \$1 billion, but they have now declined to less than \$500 million. For this reason, Japanese officials were particularly interested in working out an agreement under Public Law 480.

During the past few years, it has been the policy of the Japanese Government to promote the consumption of wheat. This it has done primarily to save money because wheat was selling at half the price of rice; a second consideration was the improving of health and nutrition by adding wheat to the diet; and a third, the increasing population and food import needs. This attitude of the government made it relatively easy for us to discuss projects for increasing consumption of wheat.

Bread consumption in Japan has increased greatly since the end of the war. And wheat imports have risen rapidly to an estimated 81 million bushels in 1954. Much of the credit for popularizing wheat consumption is given to the school lunch program. At the present time, about 4.8 million primary school children participate in the program. But more than 7 million children in primary schools and 5.8 million in secondary schools have no lunch program. The use of wheat foods in the home is being encouraged by the Ministry of Health and Welfare, which is in charge of the nutrition program. The Ministry has trained some 12,000 nutritionists, who operate the health centers and assist school and industry groups.

We heard few complaints in Japan about the price or quality of United States wheat. It seems to be fully competitive. The quality of the white wheat, which makes up most of the imports, is appreciated for the purposes for which it is used, although interest in higher protein wheat for bread making is growing.

From Japan, we flew to Hong Kong, which has been an important market for United States flour

in some years. The population of this British colony is an estimated 2.5 million, a third of whom are refugees. Hong Kong has been importing annually about 1.5 million bushels of wheat as flour. Canada, Australia, and the United States have been the principal suppliers. Since Hong Kong is a free port and currency there freely convertible, there is no shortage of United States dollars for normal consumption needs. The feeding of the refugees, however, does pose a special problem.

A new factor in the market at Hong Kong has developed as a result of the construction of a flour mill during 1954. Since its rated capacity exceeds the present needs of the Hong Kong market, the outlook for United States flour exports in that area is somewhat uncertain.

Our next stop was the Philippine Republic, the most important market in South Asia for United States flour. Flour consumption in the Republic has increased substantially since the war, and, though rice is still the principal cereal food, wheat products are eaten during at least one meal a day.

If a program under Public Law 480 is negotiated with the Philippine Republic, it should be possible to work out many projects for promoting the increased use of flour. Some factors restricting larger imports at the present time are the rigid controls on foreign exchange and the legislation requiring the substitution of up to 20 percent of local cassava flour for imported wheat flour.

On the island of Singapore, our next stop, there are about 1 million people and in the adjoining states of the Federation of Malaya, another 5 million. In the past 2 years, flour consumption in Singapore has increased 25 to 30 percent and currently equals 5.5 million to 6 million bushels of wheat. This includes some transshipments to other markets.

During the rice shortage the local government planned a program to promote increased consumption of flour, but about the time it was to begin the price of rice came down. Rice is now considered in plentiful supply, and it is expected that more rice will be eaten and possibly a little less flour in the immediate future.

Flour can be shipped from Australia to Singapore in a week or 10 days, but 6 weeks are required to get it from the United States. To take full advantage of the time factor, Australian mills have been using delayed pricing. In addition, they are



reported to have recently been getting some freight rebates. As a result, Australian flour dominates what is primarily a price market.

Singapore, like Hong Kong, is a free port with no serious dollar problem, so sales for local currency as provided in Public Law 480 are not attractive there.

From Singapore, we flew to Indonesia, which is virtually next door to Australia's wheat and flour supplies. The imports of flour into Indonesia have more than doubled in postwar years, but, even at this increased figure, per capita consumption is only about 5 pounds—one of the lowest for any major country. Indonesia has a population of about 80 million but imports only about 6.5 million bushels of wheat as flour.

A shortage of foreign currency and a policy of becoming self-sufficient in food had culminated in reduced imports and a serious flour shortage in Djakarta at the time we were there. Under present conditions, it would be almost impossible for millers to promote the sale of additional flour in Indonesia through normal trade procedures. Negotiation of a program under Public Law 480, however, could overcome some of the restrictions, specifically the ones having to do with a shortage of foreign exchange.

Our next stop was Ceylon, an island with a population of only 8 million. Surprisingly enough the country is the largest flour importer in the Asiatic area. Before the war, it imported about 1.5 million bushels of wheat as flour. Last year, it purchased about 10.5 million. This increase has been due primarily to a determined program of the government to promote the consumption of flour during the rice shortage. In the near future, it may be difficult to maintain the present per capita consumption of flour in Ceylon, owing to the large quantities of rice that are being imported under recently negotiated contracts with China and Burma.

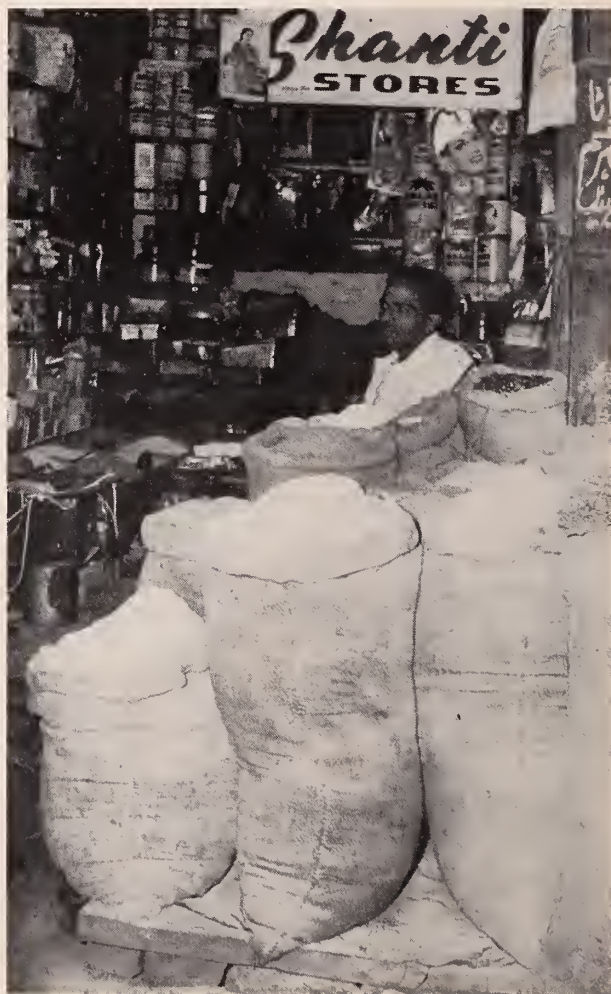
The Ceylonese Government handles all flour imports and buys flour on the basis of price rather than of type or quality. As a result, flour from Australia dominates the market, although some is purchased sporadically from almost a dozen countries.

It is a short hop from Colombo, Ceylon, to Madras, India. From Madras, we flew to Bombay and then on to the capital at New Delhi.

India has been an erratic market for wheat. In

the past 3 years, it has imported as much as 100 million bushels in 1 year and as little as 2 million to 3 million bushels in another. The principal reason for this wide fluctuation is the variable production of local grains. Rice production can decrease by 250 million bushels and wheat by 100 million bushels during a poor crop year. These unpredictable yields make it difficult to estimate what India's requirements will be in future years.

Generally accepted now is the thought that India will need to import food for years to come. India has found that unusually good crops do not necessarily mean a surplus for wide distribution, because most of the food is eaten in the areas where it is grown. If production is high, the people eat better. This consumption pattern plus inadequate trans-



Various cereals and cereal products—fine and coarse wheat flours, polished and brown rice, and coarse grains like millet—all are sold from the sack in this food shop in New Delhi, India.



portation makes it cheaper to import wheat into the large nonproducing port areas of Bombay and Calcutta than to transport it from the main producing areas within the country.

At the time of our visit, India had purchase commitments for about 20 million bushels of wheat. All but a few cargoes had been bought from Australia; the reason—a lower price. United States wheat was said to have been out of line pricewise since 1953. Australian wheat was reportedly selling in Bombay for about \$6.50 a ton less than United States wheat offers. Over half of this difference was due to the difference in freight costs. In the past few months, United States freight rates have risen almost 50 percent on wheat and flour shipments to Southeast Asia.

In the buying of food, price is the prime consideration in India. From 30 to 50 percent of the people are said to live primarily on millets and sorghum-type grains because they cannot afford



Bakers in Colombo, Ceylon, remove hot loaves of bread from the pans. The use of wheat flour in bread and rolls has increased not only in Ceylon but in many other parts of Asia.

anything else. The average annual income is about \$54 a year. For this reason, the most effective program for promoting increased consumption of wheat foods in India would be to make it available to the consumer at a lower price.

From New Delhi we went to Karachi, Pakistan. In a normal year, Pakistan is self-sufficient in wheat and rice. The balance between wheat consumption and production is so close, however, that it is doubtful that a surplus of more than 6 million or 7 million bushels will be produced in a good crop year. This is not much of a reserve for a country that uses about 150 million bushels each year.

While we were in Karachi, we were told that Pakistan had signed an agreement with the United States under Public Law 480. It was understood that no wheat was included, however, because Pakistan had some carryover of cereal grains from the last harvest. Next year, we were told, some wheat might be included in the program. Even though wheat was not included this year, there is a good possibility for using some local currency on wheat promotional programs.

In this large area to which our assignment took us, there are definite opportunities for increasing the consumption of wheat foods. One encouraging factor is the significant increase that has taken place since the war; indications are that this increase will be largely retained. Seasonal rice surpluses may temporarily decrease the use of wheat, but, the moment rice again becomes short, wheat will be used to supplement the diet. What has happened in Ceylon and Japan has proved that wheat can be adapted to the food habits of people accustomed to eating rice.

Another development is the realization by several governments that they need more flexibility in the food supply of their countries and do not have to depend entirely on rice. Over a period of time, such a change promises to be economical. These governments are realizing, too, that wheat foods are needed in the diet to improve the health of the people. Work in the field of nutrition has barely begun in the Far East.

The third factor is the tremendous increase in population. It is estimated that Asia will have 215 million more people to feed in the next decade—an increase the size of the whole population of North America. There is little reason to believe that Asia can increase food production enough to meet such demand.

# Better Trade Reporting For U. S. Agriculture

Foreign Agricultural Service asked a group of agricultural leaders some months ago what improvements should be made in its trade-statistics reporting. Their answers provided the basis for changes that went into effect in January.

To the busy reader, probably the most important change is this: that he now can get a brief summary of the current foreign agricultural trade situation in the new publication entitled *Foreign Agricultural Trade Digest*.

The *Digest* includes:

1. **Export and Import Highlights**, a two-sheet analysis of our current trade position, based on information gathered by FAS's commodity and country specialists from domestic sources and from the agricultural attachés abroad.

2. **Trade News Roundup**, one sheet of late news on government actions and related information.

3. **Trade Statistics Summary**, a two-page table showing quantity and value of exports and imports for the latest month available, the fiscal year through that month, and like periods of the preceding year.

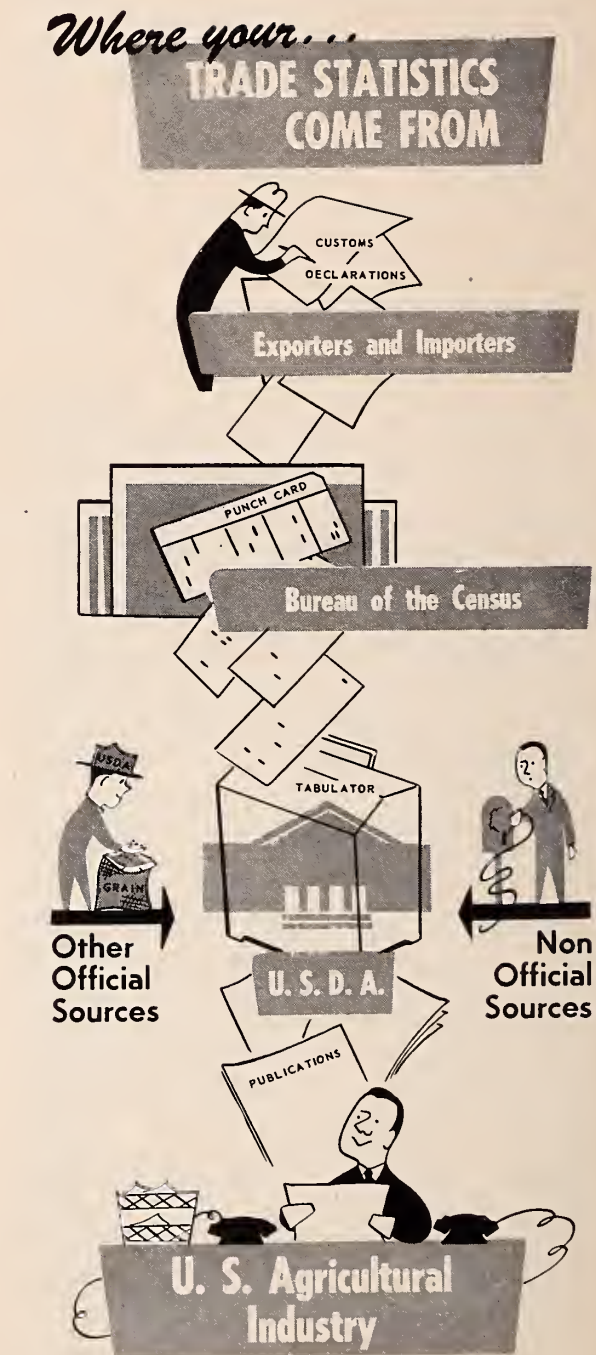
Detailed statistics on trade now appear in the monthly, *Foreign Agricultural Trade Statistical Report*. An important innovation here is the inclusion of monthly data on our export trade by principal foreign markets.

The *Report* includes:

1. **Export and Import Commodity Totals**. Exports and imports are given for the latest month available, as reported in customs declarations. For each of 364 commodities the quantity and value shipped during the month are shown, together with totals for the fiscal year through that month and comparisons with like periods of the year before.

2. **Destination of Export Commodities**. For 35 leading export items the quantity and value shipped to principal foreign markets are given for the latest month available, the fiscal year through that month, and like periods of the year before.

3. **Export Trade with Foreign Countries**. For our 24 principal foreign markets, the quantity and value of our leading export commodities are re-



ported for the latest month available, the fiscal year through that month, and like periods of the preceding year.







SOME fruit growers in the United States have learned in the past few years what the hothouse-grape industry in Belgium has known for nearly a century: the dollars-and-cents value of taking pains with their product—of planning for perfection, both in growing their fruit and in preparing it for sale.

At last fall's grape festival and exhibition in the village of Hoeilaart, center of the Belgian hothouse-grape industry, I had an opportunity to judge the quality of Belgium's grapes. Of course I was impressed by their size; I saw five grapes weighed together, and they tipped the scale at nearly a quarter of a pound. But it isn't the size of the grapes that wins in the contests between the growers. It's symmetry in the bunch, uniformity in the size of individual grapes, color, ripeness, and the artistry of the display in general. Banks of flower arrangements and skillfully placed lights emphasize the beauty of the perfect clusters.

Hoeilaart and its vicinity have more grapes under glass than any other 10 square miles in the world. The neighborhood's 33,000 glasshouses produce over 95 percent of Belgium's annual output of grapes.

Belgium's climate is not suitable for outdoor grape culture. But in its glasshouses it produces fine grapes the year round, enough for both the home market and some exports. Its total grape output is about 13,200 short tons a year; the capital investment in the glasshouses and other installations stands at an estimated 2,580 million Belgian francs (51.6 million dollars).

In Belgium, the production of grapes under glass is a village industry, mostly carried on by small growers with 8 to 10 glasshouses, although a few growers have as many as 300. It was established by Felix Sohie of Hoeilaart, who by 1866 had built 11 glasshouses. His success inspired others; in the Hoeilaart neighborhood alone, more than 4,200 families now make their living by raising grapes. Hoeilaart lies at the edge of a beautiful beech forest, about 10 miles from Brussels and near the historic

# Belgian Grapes Find Profits

By ROBERT



Grapes for export are packed for maximum appeal and minimum damage. In this box with its wood-reinforced corners, the clusters are separated by red and white cotton and trimmed with ribbon.



Grapes for the home market are packed by the cooperatives in wooden crates with reinforced edges for sale at the roadside stands.

battlefield of Waterloo. Protected by the forest from heavy winds and severe storms, the area is a natural center for glasshouse farming.

The hothouse-grape industry of Belgium was founded originally to supply extra-quality grapes out of season, for luxury hotels and restaurants and for the wealthy. This off-season market is still strong; some growers can make good profits even at the prices they must charge because of the high costs and limited yields of glasshouse farming. Now, however, the bulk of the crop is grown in the summer, when little or no extra heat is required, and marketed locally in the fall. Prices are higher than those in countries where grapes are grown outdoors but consumers feel that the quality and presentation

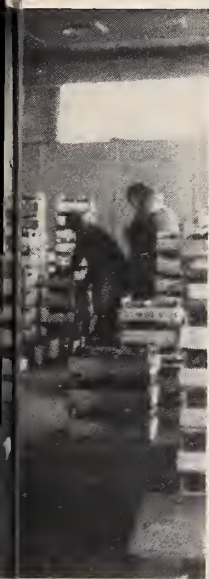


A roadside stand displays crates of grapes, which were grown in the glasshouses and sold at the grower's own price.



# Growers Perfection

PERSON



market, attractively  
boxes built with ex-  
are stored for sale  
ection.



A closer view of the careful packaging given by  
the cooperative to all the grapes it receives from  
local glasshouse operators for sale on the domestic  
market.



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of the grapes compensate for the price.

The Belgian hothouse-grape grower knows that forethought and painstaking care pay off in an extrafine product that commands an extra price. This principle he applies at every step in his farming. He sets his glasshouse on a southern slope for the maximum of sun. Then, knowing that the roots and main stems of his vines will last for 20 to 30 years, he decides the number and position of the vines the glasshouse is to shelter—usually 40 to 50, depending on the variety. As the vines grow he carefully trains them into arches at the roof, pruning the shoots back to the trunk each year. At blossom time, he plans for a specific number of bunches evenly spaced on each trunk, and cuts off all surplus blooms. Later, as the grapes form, he thins

the clusters with long scissors, taking care not to touch the grapes. He watches and cares for each cluster, clipping off and discarding any grape that splits or becomes covered with fungus or infected in any way. No wonder his grapes ripen as "perfect berries in a perfect bunch"! He has deliberately chosen perfection of form rather than high yield. His crop runs only about 770 pounds per glasshouse, but every cluster is a work of art.

Besides all the skilled labor needed to nurse the vines until harvest, the Belgian glasshouse owner must reckon with other important costs. His vines need ample water, spray, and large amounts of barnyard manure and commercial fertilizer (the industry uses about 74,000 tons of fertilizer a year). They also need heat: for off-season grapes the houses must be heated day and night all through the winter from November on. In some winters, a typical Belgian glasshouse (about 65 feet long, 23 feet wide, and 9 feet high) might need as much as 20 tons of coal. Even in ordinary winters, the industry uses about 212,000 short tons of coal a year. Generally each house has its own simple furnace and boiler, and in cold weather a grower with 8 houses has all he can do.

Most of the larger growers, however, have central heating plants. And during the last few years, an association of smaller growers has been trying to finance the installation of a central heating plant to supply all the small growers in the Hoeilaart area, thus saving both fuel and labor. The association has asked the Belgian Government to supply funds for this project.

After the grapes are harvested, the Belgian grower, in preparing them for market, still works on the principle that planning and care pay off. If his grapes are for export, he packs them with exquisite care in sturdy boxes that may bear his own attractive brand mark. Each box of grapes

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Mr. Anderson is Agricultural Attaché, American Embassy, Brussels.

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SOME fruit growers in the United States have learned in the past few years what the hothouse-grape industry in Belgium has known for nearly a century: the dollars-and-cents value of taking pains with their product—of planning for perfection, both in growing their fruit and in preparing it for sale.

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# Belgian Grape Growers Find Profit in Perfection

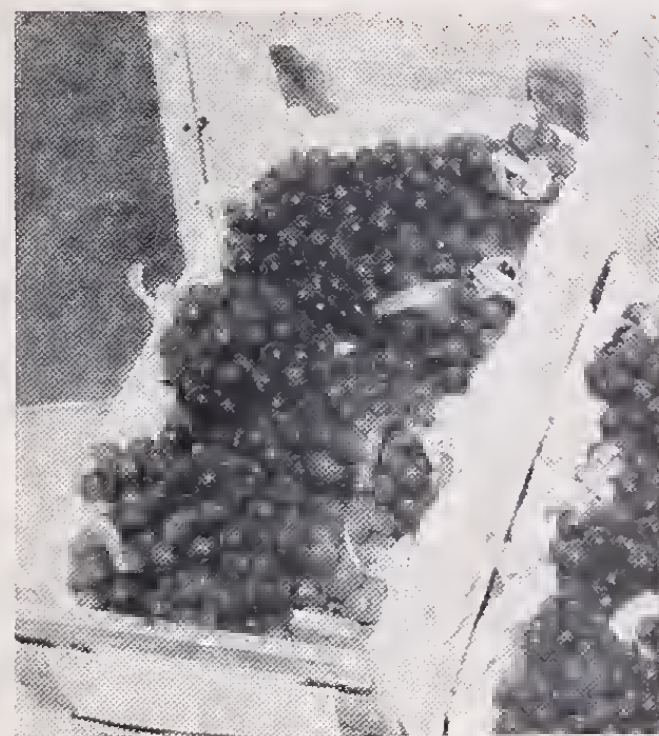
By ROBERT ANDERSON



Grapes for export are packed for maximum appeal and minimum damage. In this box with its wood-reinforced corners, the clusters are separated by red and white cotton and trimmed with ribbon.



Grapes for the domestic market, attractively packed by the cooperative boxes built with extended edges for safety, are stored for sale at the auction.



A closer view of the careful packaging given by the cooperative to all the grapes it receives from local glasshouse operators for sale on the domestic market.

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A roadside stand presenting an inviting array of grapes, which were grown in the seller's own glasshouse nearby.

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Mr. Anderson is Agricultural Attaché, American Embassy, Brussels.







Row upon row of glasshouses in Hoeilaart, Belgium, are persistent symbols of the area's chief industry—growing hothouse grapes. In an area only 10 miles square, 33,000 of these houses produce 95 percent of the country's grapes.

consists of one layer divided by cotton padding into individual compartments for the bunches. Slender ribbons and green paper leaves usually embellish the stem of each bunch, and the cotton pads may even be colored!

If the grapes are for domestic consumption, however, as a large share of them are, the small grower in the Hoeilaart area will probably take them to the central cooperative to be uniformly packed and sorted until the weekly public auction at which most such grapes are sold. Here, too, the grapes receive considerate handling. Arriving fresh and unbruised after their short journey from the glasshouse, they are kept that way in high-sided boxes that stack on each other with plenty of space between, like a businessman's In and Out boxes, so that the grapes in each box are never crushed by the box above.

A further outlet is the private fruit stand along the highway near the growing area. These stands are usually run by members of the growers' families. Here, as at the cooperative and in the packing room of the producer of grapes for export, great care and good taste are used in handling and packing the grapes. The result is a fresh, neat, and artistic display that offers considerable temptation to a passing motorist. I observed one busload of Iowa farmers yielding to the suggestion made by the sign "Here you can taste before you buy," and finding the experience, and the taste, very pleasant.

This particular stand featured the Royal, Muscat, and Frankenthal varieties. Before the war, the

most popular variety was Frankenthal; now, it is Royal. Also popular, despite their high prices, are the Muscat and Canon Hall varieties of white grapes, which are considered to have the best flavor. Belgian consumers like also the Colman, Ribier, and Leopold III varieties.

Local production enjoys exclusive rights on the home market. Imports of fresh grapes into Belgium are prohibited except for one variety, Black Alicante, which may be imported from the Netherlands subject to a minimum-price restriction under the Benelux agricultural protocol. A very small amount of Luxembourg grapes also is imported for mixing with apple cider.

Belgium's lovely grapes are favorably known in many countries. Before the war, exports averaged about 2,260 short tons annually, and went to 27 different countries. In some years as much as a fourth of the crop went to the United Kingdom; Germany, France, Sweden, the United States, and other countries took smaller amounts. However, Belgium has not been able to regain this market in the postwar period. Especially during the last few years, exports have been small. But growers are hopeful that the prosperity now evident in many European countries will make possible the recapture of this prewar luxury trade. Some hope, also, that the beauty of Belgium's grapes can compete with the richer flavor of ours, and win a place in our holiday fruit bowls.



Belgium's beautiful hothouse grapes are displayed by their growers each fall at the grape festival in Hoeilaart.



# U. S. Cattle To Improve South American Herds

by GROVER J. SIMS



United States breeders of cattle for warm climates are selling more and more of their product in Latin American countries. Last year 15,000 head valued at more than \$8 million moved to far-flung points south of the border—a considerably larger export than in the year before and the largest since 1946.

Colombia, Venezuela, and several other Latin American countries obviously are on the threshold of a new era of livestock raising. These nations want to diversify their agriculture. Too often they have seen the distress that accompanies a fall in the price or a failure of an important crop—coffee or cacao, for instance—and they wish to spare their economies from the effects of one-crop farming.

They also want to improve the living standards of their people. As South America has become more industrialized, its beef surplus has tended to decline. Its population is increasing rapidly, and in many parts of the continent the standard of living is rising fast; both circumstances make strong incentives for increasing livestock production. South America's long-time role as an important supplier of beef for deficit areas of the world seems to be on the wane: Argentina and Uruguay are now the only surplus-beef producers of any importance; and many countries such as Colombia, Peru, Paraguay, and Brazil, which formerly were large exporters of beef, are finding it difficult to produce enough to fill the expanding needs of their own people. In fact, in a few years the beef importers of the world may not be able to buy beef in Latin America and may have to look to Africa as a new source.

The cattle that Latin America received from the United States in 1954, many of which were high-class bulls, included several breeds. Chief among



The United States Brahman, developed for the humid areas of our southeast, is one of the breeds favored by South Americans.

them were the United States Brahman, the Santa Gertrudis, the Charbray, the Brangus, and the Beefmaster, all of which have been developed to meet the particular needs of cattle producers in the humid areas of southeastern United States. The great increase in the number and productivity of cattle in these areas in recent years is evidence that these special breeds will meet the rigid requirements in the subtropical and tropical regions of Latin America.

All these breeds contain Brahman blood and so are able to endure high temperatures. All have been bred for large size to offset the tendency of cattle in warm climates to become smaller with each new generation. All are disposed to graze the year around and to be good rustlers when grass is dry

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and water is scarce. And all are resistant to cattle ticks and the other parasites and pests that are so difficult to control in the Tropics.

United States Brahman are a breed specifically tailored for southern cattlemen. The Brahman, or the zebu (*Bos indicus*), was originally a native of India; but eventually several kinds, including Nelore, Guzerat, Krishna Valley, and Gir, were brought to the United States, and in about 1910 they were beginning to be used on a few scattered ranches in Texas. They were not retained as pure breeds but were crossed with each other and with range cattle of European origin (*Bos taurus*). Out of these combinations has evolved a new type of Brahman, an animal so changed and improved by years of selection and breeding without the introduction of foreign blood that now it can almost be considered of United States origin. It is usually gray in color, is of excellent beef conformation, and has retained the zebu characteristic of hardiness under unfavorable tropical climate.

Santa Gertrudis cattle were developed on the King Ranch in southwest Texas from a cross between beef-type Shorthorn cows and beef-type Brahman bulls. Breeding between these species started in 1910 and continued for approximately 15 years. After 30 years of following a well-defined plan of selecting, inbreeding, and line breeding, breeders of these red cattle finally succeeded in fixing the characteristics sufficiently to win recognition of the breed by the United States Department of Agriculture in 1940. It was the first distinctively American breed of cattle to be so recognized. The Santa Gertrudis is a large beef animal; on pasture, many mature cows attain a weight of 1,600 pounds and mature bulls, 2,000 pounds.

A cross of the Charolaise and the Brahman has produced the Charbray, which has some of the characteristics of each parental breed. The Charolaise breed first established itself at the start of the 18th century on the meadows of central France and has since extended itself throughout all of that country and to foreign lands. In their native home, Charolaise cattle graze on pasture most of the year with little supplemental feed in winter. Most of the various Charolaise bloodlines in the United States have been developed from cattle imported during 1936 to 1942 from the herd of the late Juan Pugibet of Mexico City.

In order to qualify for registry as Charbray, the

animals must have at least one-eighth and not more than one-quarter Brahman, and the remaining fraction must be Charolaise. Their coloring is usually a creamy white. They are horned and give almost no evidence of the Brahman hump but do show signs of the dewlap and have some excess skin in that region. They are large cattle and produce vigorous, fast-growing calves. Because of their desirable grazing habits and the ease with which they can be handled, they are being used extensively in the south and west for crossing with other cattle.

The Brangus, which is a cross between the Brahman and the Aberdeen Angus, has been one of the most popular breeds for export. The name is a registered trade name and can be used only for cattle registered with the American Brangus Breeders Association. This Association, founded in 1949, registers cattle which are three-eighths Brahman and five-eighths Angus. They are black



Purebred cattle from the United States are moving to South America in ever-growing numbers. Last year, U. S. breeders' sales south of the border totaled 15,000 head valued at approximately \$8 million.



and hornless, smaller than either the Santa Gertrudis or the Beefmaster, but well regarded because of their blocky conformation and early maturity.

The Lasiter Beefmaster is another popular type for export to Latin America. The animals that go by this registered trade name were developed by the late Edward C. Lasiter of Fulfurrias, Texas, and his son Tom. It is estimated that the Beefmaster contains half Brahman, one-quarter Hereford, and one-quarter Shorthorn. The Lasiters have stressed the six principal characteristics of the breed: Disposition, fertility, weight, conformation, thriftiness, and milk production. They have tested the progeny to develop better growth characteristics. While no color requirements have been established for the Beefmasters, they are usually dun, brown, reddish brown, or red. They may have some white extensions and a few spots of the darker colors. Coming from large parents, they are of course relatively large cattle; many mature bulls on pasture weigh as much as a ton.

Many countries in Latin America are receiving

cattle of these breeds from the United States. Chief of these, in the order of number imported in 1954, are Venezuela, Colombia, Mexico, Cuba, the Dominican Republic, Brazil, Costa Rica, Guatemala, Argentina, Ecuador, Nicaragua, and Panama.

In Venezuela, for example, about 1,300 pedigreed Brahman bulls from Texas have arrived in port cities since last November. They are the first of 5,000 head which the Government is purchasing this year under its cattle-hybridization plan. This plan is expected to continue for a number of years on a similarly large scale; under it, the Government is offering farmers credit to encourage purchases of the new stock.

Colombia is another country that is giving increased attention to the introduction of better stock. During 1954 it imported more than 4,000 head of breeding cattle from the United States. And it has taken several measures during the past year to expand production and to improve the quality of the local stock.

For one thing, it is making improvements in the credit facilities available to the livestock industry:



United States Brahmans on their way to a Venezuelan pasture. The Venezuelan Ministry of Agriculture plans to import from United States breeders 5,000 of these animals a year.



it has established more livestock departmental credit associations; and it is providing larger loans with more attractive terms, especially for the importation of breeding stock, for which a long-term loan for as much as 100 percent of the value of the imports is available. Lending agencies in Colombia, however, are themselves in need of further credit for the project; and sources are being explored. Two of the semiofficial banks of the country are willing to guarantee repayment of loans to the Colombian cattlemen if such loans can be obtained from private banks in the United States or from the Export-Import Bank.

The Colombian Government is also making tax concessions to encourage imports of breeding stock, and is itself purchasing purebred animals for resale to colonists. It also has considered plans for large-scale imports of commercial heifers and is planning to establish a national federation of livestock producers with enough capital and authority to make a substantial contribution to the development of the industry.

There is a need in Central and South America for a dairy cow that will withstand the adverse climate there and still "fill a bucket." For those areas, animal breeders have not yet produced dairy cattle that have the perfection of breeds used in the United States. In countries like Ecuador and Peru, dual-purpose, or milk-and-meat, types of cattle are popular, especially at the higher elevations. To develop such types, the Brown Swiss and Holsteins have been used extensively for crossing on the criollo, or native, strains. Crosses between criollo and Holstein, criollo and Brahman and Holstein, and criollo and Brown Swiss have been among the most adaptable types on the coastal plains of Colombia. In much of Latin America, cattle are used extensively for work and thus must be not only dual-purpose but triple-purpose as well.

Practically all of the cattle shipped to Latin America in the past few years have been sent by private individuals. However, programs of the Foreign Operations Administration (FOA) have financed the sale of a few select breeding animals to several areas; in selecting the types desirable for export, FOA has been assisted by breed associations and others. Inspectors of the Agricultural Research Service of the United States Department of Agriculture examine all animals to be exported and verify that they are free from transmissible diseases. They also prescribe the manner in which the

## Agreements Under P. L. 480

Under Public Law 480, the Trade Development and Assistance Act of 1954, agreements have been signed with Chile, Peru, Turkey, and Yugoslavia that will dispose of nearly \$70 million worth of our surplus agricultural commodities for foreign currencies. A number of other negotiations are now being concluded, and still others are in process. In total the programs negotiated or under negotiation with other countries amount to approximately \$453 million. This figure represents about two-thirds of the total funds authorized for the 3-year program.

A tentative breakdown of the \$453 million target by geographical areas is as follows:

	<i>Millions of dollars</i>
Western Europe .....	205.5
South America .....	44.0
Middle East (Turkey) .....	30.3
Southeast Asia .....	173.0
<b>Total .....</b>	<b>452.8</b>

Public Law 480 authorizes up to \$1 billion in federal funds for the disposal of surplus commodities overseas. Up to \$700 million may be used over a 3-year period to facilitate sales of surplus commodities for foreign currencies. Up to \$300 million may be used to finance outright grants of surplus commodities for emergency and relief assistance to needy areas abroad.

For the latter, programs for the first year are expected to amount to about \$150 million. The Christmas package program, in which the needy people of many areas of the world participated, and the flood relief program for Pakistan are examples of the use of funds under these programs.

animals will be loaded and the conditions under which they will be transported to assure that they will receive humane treatment and adequate feed and care en route.

Shipments of a few head may often be sent advantageously by air. Some of the cattle move from airports near the ranches to port inspection centers and then directly to their destinations without unloading en route. Large shipments go by boat.

The Foreign Agricultural Service, through the combined efforts of its agricultural attachés and its Washington staff, has been instrumental in directing would-be purchasers of cattle to sources of supply in the United States and in putting breeders in the United States in touch with prospective buyers abroad.

The tropical and subtropical regions of Central and South America have considerable potential for increased production of beef, and it is believed that, inasmuch as most of the increased production could be consumed domestically, the cattlemen in Latin American countries would not in the fore-



seeable future become substantial competitors with cattlemen in the United States. Sale of breeding stock to these countries, therefore, would seem to be advantageous to United States producers, not only in offering outlets for excess breeding stock

but in contributing to the prosperity and purchasing power of our neighbors. It points up the fact that the agricultural interests of two countries can trade together to the mutual advantage of both.

*A unique feature of Indonesia's banking system is the traveling bank, which brings credit facilities to remote areas of the country.*

## Rural Banking in Indonesia

By PETER DIEBOLD

Without ever leaving his village, an Indonesian farmer living in a remote rural area has easy access to banking facilities—something that most farmers in the East and Middle East do not have. Available in the village are a rice bank that lends rice to tide him over until his new harvest and a village (desa) bank that makes small short-term cash loans. And each month a traveling bank (rombongan) that handles larger, long-term cash loans is sent around by the nearest branch of the People's Bank, or Bank Rakjat, Indonesia (BIR).

The idea of rural credit institutions is firmly established in Indonesia. The first such institutions date back to the turn of the century, when a Dutch official named De Wolff promoted the founding of savings banks and rice banks. The savings banks were located in small towns out of reach to most villagers.

But the rice banks did serve the small villages; and several years later came the village banks themselves, which dealt in cash. The number of rice banks, 250 at the start, had swollen to 12,424 by 1913, but shrank to half that by 1926, and to 3,635 by November 1954. While half the rice banks were closing, 3,418 new village banks were opening, and by November 1954 there were 4,567.

The BIR is responsible for almost all this far-flung system of farm credit. It controls and administers the local institutions—the village banks, the rice banks, and the credit cooperatives (where there is no cooperative bank of a higher order)—

that extend small credits to the village people. And its 112 local branches make larger loans to individuals and organizations—generally for amounts of not less than 250 rupiah (about \$20)<sup>1</sup> and for periods of not less than 2 months. Of the total loans of about 40 million dollars granted by the BIR in 1953, 21 percent was lent in rural areas. People living in the regency capital or nearby get their loans direct from the branch bank. Most of the rural areas, however, are serviced by the traveling banks, which function as departments of the branch banks.

The average traveling bank has a cashier, a bookkeeper, and two clerks, and its equipment consists of a station wagon and a cash register. Once a month it visits the various villages on its route. The bank is parked at some central point of the village, and banking takes place often in the mayor's house, sometimes in a store, and occasionally at a stand in the central market place. Before the war a specially equipped truck with a cash register and counter was used, and banking took place inside the truck itself.

The traveling bank is not a substitute for the village banks; it does not extend small short-term credits, but, like the BIR branch bank itself, concentrates on larger, longer term loans, usually from about \$90 to about \$260, and sometimes as much as \$900 to one person. Loans are on a 10-month or seasonal—that is, 6-month—basis, at 12 percent interest per annum. Each month the borrower repays one-tenth of the loan plus one-tenth of the total interest rate calculated on a system of compounded rates. BIR officials estimate that only about two-fifths of the loans made by the traveling banks are for agricultural purposes such as farm-

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<sup>1</sup> One dollar = 11.40 rupiah.

building construction or the purchase of livestock, fertilizer, and the like. The rest go not to agriculturists but to traders or craftsmen setting up buildings or godowns.

To observe the functioning of a traveling bank, I visited the one that calls at Leuwiliang, one of the larger villages in Bogor Regency. Leuwiliang is the capital of a subdistrict and the seat of a *tjamat* (township officer). The traveling bank was operated at the *tjamat*'s office, where the bank staff worked at tables set up on a covered porch. From 8 a. m. till 1 p. m. they collected payments on loans, and from 1 to 4 p. m. they made new loans. At the time of my visit, Leuwiliang had 223 borrowers with seasonal loans amounting to 66,524 rupiah (nearly \$6,000). More than half the borrowers were traders and craftsmen, although this is one of the most prosperous agricultural districts, having year-round irrigation with two wet rice crops and one dry *polowidjo* (nonrice crop).

Village banks are set up to serve a different sort of need—that for smaller credits on a short-term basis. Under the rules of the BIR no village bank can lend more than 250 rupiah (about \$20) to an individual. Loans are made for 10 weeks. During this period, the borrower pays back weekly installments of one-tenth of the loan, and after having repaid the tenth installment, pays an eleventh as interest. In some banks a twelfth installment is required from the borrower; this is considered a forced loan, and the bank returns it without interest after a year. To be able to borrow from the village bank, a villager must be investigated and approved by the *Commisssie Bank Desa*, a committee of five villagers elected by the community. The *Commisssie* must be present on the day when loans are issued and repaid. Each of its members receives for his services 2½ percent of the loans repaid, but not more than 120 rupiah a month (about \$10).

In 1953 the village banks lent over 13 million dollars, compared with 2½ million dollars in 1951 and 12.4 million dollars in 1938. However, in terms of the present purchasing power of money, the 1938 total is considerably above that for 1953.

To observe the functioning of a village bank, I visited the one in Simplak, a town of a little more than 3,000 people near Boro. This bank can be considered typical of those in Java's more prosperous areas, where a village contains a high percentage of so-called small traders.

In the Simplak bank, loans are made and repaid

on one day each week, from 8 a. m. to about 1 p. m. For the first half of the banking day, loans are repaid; for the second half, new loans are made. The operations I observed took place at the house of the village head. Around a large table on the open porch were seated five members of the *Commisssie*, the bookkeeper, the village head, and on this occasion the supervisor of the BIR. As each borrower repaid one-tenth of his loan the credit slip he carried was stamped and an entry made by the bookkeeper in the books of the bank. Shortly before the end of the repayment period \$197 had been collected; by the end of the banking day, \$178 of this had been given out in new loans. Of 213 borrowers in the village, only 3 absented themselves; these were small traders who had to be out of the village for business reasons. The Simplak bank was founded in December 1951 with a loan of 3,000 rupiah (\$263) from the BIR. Considering the high rate of interest charged, it is not surprising that within 2½ years the bank has been able to repay this initial fund. In addition, it now has outstanding loans amounting to 16,500 rupiah (about \$1,450), which means a total earning of over \$1,700. On the basis of these observations, the village banks are operating on a sound financial basis. Their earnings, however, are going to the communities rather than to individuals; and the communities' use of these earnings may be on a less sound financial basis. For example, the village head of Simplak wanted to invest bank earnings in a bank building which did not appear really necessary, and which would divert from more productive investments the money earned by the bank.

Most borrowers from the village bank do not seem discouraged by the high interest rate charged—104 percent in terms of annual interest. Their nonchalance may be due partly to long experience with usurers' interest rates, which are usually from 260 to 520 percent a year. Even the usurers' rates, since they are always expressed in weekly terms (i. e., from 5 to 10 percent per week), do not look so high to the unsophisticated borrower as they really are. However, although the village bank's interest rates appear to be no burden to the small trader, they are much too high for the farmer, and make it difficult for him to accumulate savings for the improvement of his farm. This disadvantage to the functioning of the village bank is recognized by the Government, which is encouraging the trans-





At Leuwiliang, Indonesia, peddlers set up their stands beside a traveling bank, which has just opened for business on the porch of the "town hall."

formation of village banks into credit cooperatives.

The rice bank, unlike the traveling bank and the village bank, makes few loans in cash. Its chief function is to lend rice to the rural population during the critical period before the new harvest, when stocks of food have been exhausted. Because the rice bank needs storage buildings and godowns, which have to be maintained and inspected, it requires a larger investment than the village bank, and its administration is much more difficult and costly. Nevertheless, its importance as a source of credit to the rural people and especially the farmer, although decreasing, is still considerable.

The BIR and the local institutions under its control are still the major components of Indonesia's farm credit system. However, it is the policy of the Indonesian Government, as well as of the farmers' associations, to make a shift in emphasis, from Government control to cooperative control. At the end of 1953, there were 8,108 cooperatives in Indonesia; most of them were founded as credit institutions that later took on other activities such as cooperative marketing, cooperative buying, and the like. Of the total, only 2,390 were cooperatives handling credit only. Membership in 1953 numbered 1,409,735; personal savings amounted to nearly 7.9 million dollars, less than 1 percent of it from nonmembers.

The credit operations of the cooperative bank closely resemble those of the village bank. Interest

rates are the same, and loans are paid back in weekly installments of 10 percent with one additional installment as interest and another as forced savings. Seasonal credit is granted to farmers at 2 percent a month, repayment of the loan in full being required at the end of the period. What chiefly distinguishes the credit cooperative from the village bank is the fact that most of the profits go back to the borrowers.

On the institutional side, judging from the number and broad distribution of banks and co-operatives, Indonesian farmers appear well served, especially when compared with farmers of other Asian countries. But on the basis of the type and quality of service rendered, the picture is much darker. High interest rates make long-term loans for productive purposes such as farm improvement or purchase of equipment and fertilizer too costly to be remunerative to the farmer. Consequently, loans are mainly either short-term loans for consumption purposes, to tide the borrower over financial difficulties, or, more often, commodity loans to small traders and peddlers of village products. The Indonesian Government is at present considering proposals to encourage farm loans that will lead to improved agricultural practices. Fortunately, there are thousands of rural banks that will be able, with relatively few adjustments, to finance effectively any forthcoming program for agricultural credit.

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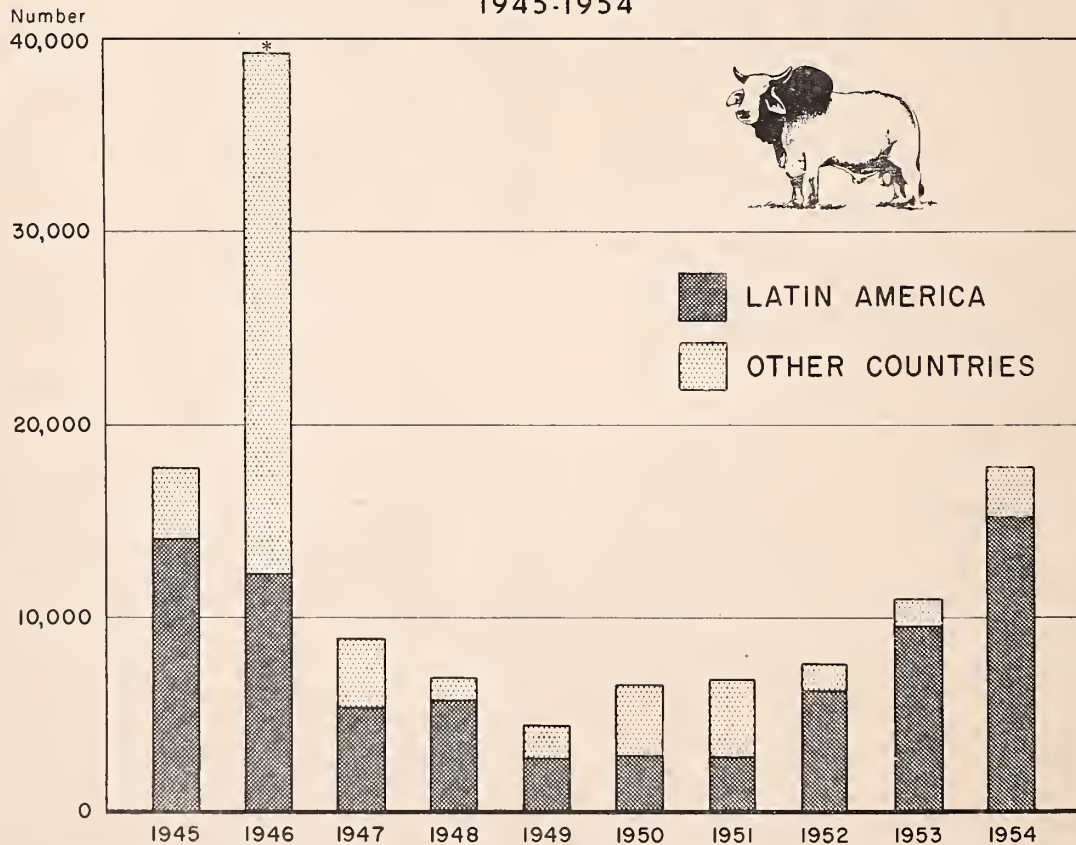
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## UNITED STATES EXPORTS OF BREEDING CATTLE 1945-1954



\* Exports in 1946 were unusually large because in that year the United States sent 26,000 head to European countries to help rehabilitate their livestock industries after the war





